

Minutes
NRSP6 Technical Advisory Committee meeting 2015
June 23-24, Sturgeon Bay WI

The meeting was hosted by the US Potato Genebank at their facilities in Sturgeon Bay.

Tuesday, June 23rd

Attending - Genebank personnel: M. Martin, J. Schartner, J. Bamberg. Tech Reps: R. Novy, D. Douches, D. Holm, W. De Jong. Administrative Advisors: R. Lindroth, E. Ashworth (by phone). Quarantine: J. Abad. AAFC - B. Bizimungu. Industry: D. Ronis (Frito-Lay), G. Gusmini (Frito-Lay), R. Gieringer (CETS), K. Coakley (CETS), R. Coakley (CETS), J. Petrick (CETS), S. Petrick (CETS). Local scientists and miscellaneous guests: A. Cassity, C. Caravati, R. Hoopes (retired), S. Jayanty, J. Endelman, S. Jansky, H. De Jong (retired), D. Spooner.

Minutes following are numbered according to the Agenda (attached).

1. M. Martin called the meeting to order at 8:55 am
2. Agenda – no changes made (unanimous)
3. Minutes from 2014 meeting – unanimously approved.
4. Chairman Holm appointed R. Novy, D. Douches and W. De Jong to the resolutions committee.
5. Lead AA R. Lindroth report – NRSP-6 renewal was recently submitted. [NRSP-6 represents about 1/6 of genebank funding]. ESCOP unanimously recommended it be approved, with additional recommendation that external funding be secured in the future. Experiment station directors will vote on renewal in late September. Also, State of Wisconsin has reduced funding of UW-System by \$250 million, to take effect on July 1. Genebank is located on a UW-Madison agriculture research experiment station, one of twelve such stations in the state. Effect of cuts, if any, on these research stations is currently unknown.
6. Regional AA E. Ashworth report – variety development in Maine continues, led by G. Porter.
7. Tech rep reports – written reports from tech reps are attached. Some highlights: R. Novy is the new USDA/ARS tech rep, succeeding C. Brown. T. Michaels now oversees potato breeding at U. Minnesota. Bamberg mentioned that genebank plants 100 clones per year to generate tubers – these are used to meet requests for clonal material from researchers as well as hobby growers (all receive 2-3 tubers of clones of interest). Both D. Douches and D. Spooner have observed that some clones of *Solanum phureja* are not diploid, but tetraploid.

8. Agriculture and Agrifood Canada Report – distributed by B. Bizimungu (attached).
9. Industry and Cooperator Reports – Gabe Gusmini is part of a new unit of PepsiCo looking at genetics and agronomics of sustainable production. Working with Bamberg to look at potato diversity. Are collecting genotyping-by-sequencing data, much of it will be made public. Curzio Caravati initiated the Kenosha Potato Project, which has an emphasis on urban potato production; see their Facebook page. Attending this meeting as unofficial representative of Seed Saver’s Exchange, which maintains 650 clones, most of which have virus, and some of which are presumably duplicates. Scott Petrick from Controlled Environment Technology Systems (CETS) gave a presentation about the company’s product, a growth chamber for seed potato production, which gives 40x the output of greenhouse multiplication.
10. Genebank report – Bamberg has already made it available online. Some highlights: have found extra large tubers in *S. cardiophyllum*; are now using embryo rescue with some crosses; have developed ‘Harlequin Moon’, an egg-yolk style potato with better dormancy than *S. phureja*; are preparing a core collection of *phureja*, *verrucosum* and *demissum*; ‘Seeds of Time’ film has a segment that features genebank staff collecting wild potato germplasm.
11. USDA/ARS Madison report – Spooner distributed a summary of his life’s work (Botanical Review (2014) 80: 283-383. Systematics, Diversity, Genetics and Evolution of Wild and Cultivated Potatoes). Jansky is moving away from screening germplasm to moving desirable alleles found in screens to more adapted germplasm, for breeders to use. Emphasis on resistance to Verticillium, PVY (from *S. chacoense*) and common scab (also from *S. chacoense*). Has recently worked to develop several recombinant inbred lines (RILs), each emphasizing different traits; RILs will be hosted at genebank.
12. P. Bretting (National Program Leader) submitted a written report (attached).
13. NIFA – no report submitted.
14. APHIS Quarantine – Abad presented overview of potato quarantine facility. To bring potatoes into country, need to contact Abad beforehand. Material enters as tissue culture plantlets, is tested for virus, cleared of virus in necessary. Process takes 1 year. Mid-July is deadline for requesting import of new clones. At present, 120 clones per year can be imported (total number for the entire country).

In the ensuing discussion Dr. Abad reiterated a story he told last year, about 55 Peruvian cultivars that had been hand-carried into the USA with an import permit that had been issued in error. Peru did not give permission for these clones to be exported. On hearing this, G. Gusmini left the room, asking to be informed when the discussion ended. Voting members unanimously passed the following motion: “We advise Jorge to raise the issue of the 55 clones with the USDA Crop Germplasm Committee, and in the strongest terms recommend that these clones be immediately destroyed. More generally, we recommend

that the quarantine service not process any materials that have been imported without the originating country's permission". Many present have worked hard and long to build trust with Peru and other South American countries regarding the characterization and utilization of wild and cultivated potato germplasm. Allowing this material to be distributed would destroy that trust and substantially hamper future research and collaboration with our South American colleagues in improving potato for all humankind.

15. Resolutions – unanimously approved:

1. Whereas Charles Brown, USDA-ARS, Prosser WA, served faithfully and conscientiously as the USDA/ARS technical representative of the NRSP-6 technical advisory committee from 1999 until 2014, let it be resolved that we thank Chuck for his many years of dedicated service and advice to the US potato genebank. His warm character and delightful sense of humor were appreciated at the advisory meetings over the years.
2. Whereas John Bamberg, Max Martin, Jesse Schartner and other genebank staff organized an excellent meeting, complete with an overabundance of delicious snacks, as well as presentations that provided a thorough overview of the excellent work they conduct to maintain, characterize and disseminate germplasm resources for the benefit of scientists in the USA, Canada, and around the world, let it be resolved that the genebank staff be commended in the highest possible terms for their hospitality and scientific contributions to the potato community.
3. We would like to recognize the support from Janina and Scott Petrick, Randy and Kris Coakley, and Judge Raymond Gieringer of the CETS company for providing an evening of collegial interaction and fellowship for the attendees of the genebank meeting.

16. Election of New Officers and Venue for 2016 – In the longstanding (and exceptionally good-natured) tradition of the committee, Craig Yencho was nominated and unanimously acclaimed to become Secretary in 2016 – because he didn't attend this year's meeting.

New TAC officers for 2016:

Yencho = Secretary

De Jong = Vice Chair

Novy = Chair (Brown was scheduled to be chair, but has stepped down from the committee; Novy to become chair as he is Chuck's successor).

Venue for 2016: Colorado, likely Fort Collins. Dates to be announced.

Meeting concluded at 9:05 am, Wednesday June 24th. Meeting was followed by an in depth-tour of the Peninsular Ag Experiment Station and Potato Genebank facilities.

Respectfully submitted,
Walter De Jong, Secretary